

Abstracts

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dent hypertension associated with the use of celecoxib and non-selective (NS) NSAIDs in a real world setting. **METHODS:** A cohort study was conducted using secondary data from the GE Centricity® Electronic Medical Record database, which contains the medical records of 3 million patients seen by 5000 physicians in 27 states across the US. The index date was defined as the date of the first NS NSAID or celecoxib prescription between January 1, 1999 and June 30, 2004. Patients were included if they were aged 18 or older and were enrolled for at least 365 days prior to the index date. NS NSAID users were matched to celecoxib users using propensity-based matching techniques by a 2:1 ratio. Multivariate Cox proportional hazard models were used for the analysis. **RESULTS:** The final sample consisted of 51,444 patients. Among the 17,148 celecoxib users, 222 (1.3%) had a new diagnosis of hypertension, while 446 out of the 34,296 NS NSAID users (1.3%) had a new diagnosis of hypertension. The crude incidence rate for hypertension was slightly higher for celecoxib users: 52.5 vs. 51.8 per 1000 patient per year for celecoxib and NS NSAID users, respectively. Relative to NS NSAID users, patients on celecoxib had a similar rate of post exposure hypertension incidence in multivariate analyses (HR = 1.006; 95% CI: 0.856–1.181). **CONCLUSION:** Results from a population-based cohort analysis of electronic medical records suggest similar rates of incident hypertension between celecoxib and NS NSAID users.

CARDIOVASCULAR STUDIES—Cost Studies

PCV16

AN ECONOMIC ASSESSMENT OF THE CONTROL AND DETENTION PROGRAMS IN HYPERTENSIVE MEXICAN POPULATION (2005–2025)

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OBJECTIVES: To assess the economic impact in the Mexican Health System of a hypertensive population preventive program (HPPP) in order to shift cardiovascular risk on the long-term. **METHODS:** Costs and health benefits were forecasted for the period 2005–2025 after the implementation of a control and detention program in hypertensive population in Mexico. Incidence and prevalence data was obtained from a Mexican National Survey (Encuesta Nacional de Salud 2000) for population between 20–59 yrs. Preventive actions included in the program were: opportune detention of hypertension with two measures of arterial hypertension per year to all adult population attended in the Mexican Health System. Secondary prevention actions consisted in changes in life styles and intensive pharmacologic treatment in patients with uncontrolled hypertension. Health care costs data was obtained from the Social Security Mexican Institute (IMSS) databases and the HPPP effectiveness was taken from published literature for worldwide similar preventive programs. Framingham tables were used to constructed disease progression simulations and effectiveness measures used in the assessment were the number of new cases of patients controlled and cardiovascular events avoided. The analysis was conducted from the health care payer's perspective (only direct medical costs were used). **RESULTS:** Through 20-years analysis period, the total number of hypertensive cases remained unchanged. Nevertheless, the number of new hypertensive cases controlled increased in 74.8% which represented a reduction of 6.6 millions cases uncontrolled. On the same time horizon, the HPPP showed a decrease of 16.9% in the total

number of cardiovascular events which represented approximately 1.7 millions less complications in the Mexican Health System. The latter could represent in the future net savings in US\$1652 millions compared to the actual scenario. **CONCLUSION:** Preventive actions included in control and detention hypertensive programs resulted to be cost-effectiveness policies, and showed to be cost saving strategies in the long-term.

PCV17

COMPARING THE COST OF MICROSURGERY AND RADIOSURGERY FOR THE MANAGEMENT OF VESTIBULAR SCHWANNOMA

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OBJECTIVES: To investigate differences in follow-up costs of patients undergoing microsurgical resection, which requires hospitalization, compared to stereotactic radiosurgery, an outpatient procedure, for the treatment of vestibular schwannoma. **METHODS:** Post-surgical medical utilization records and cost data were retrospectively gathered for 82 patients undergoing microsurgery or radiosurgery. Follow-up costs were obtained using administrative datasets and were discounted. Thirty-one patients did not have any follow-up care at our facilities. For patients seeking follow-up care elsewhere utilization records (prospectively gathered) were matched to our administrative costs using median values. To adjust for varying lengths of follow-up, the cohort was reduced to those having a minimum length of follow-up of 28 months. Results were verified with 36 months of follow up. **RESULTS:** In the initial cohort, age and patient location were significantly associated with surgery type. Radiosurgery patients tended to be older. Mean costs per month using a six month moving average for microsurgery patients initially were high and leveled off to below \$200 per month. Conversely mean follow-up costs for radiosurgery patients started low and fluctuated through high and low cycles, reaching as high as \$200 per month. **CONCLUSIONS:** Many of the radiosurgery patients did not have follow-up at our facility so we estimated them from surgery-related follow-up utilization. In addition, radiosurgery is a relatively new procedure and clinicians are not yet in agreement on a reasonable length of follow-up. Including other health care costs for these patients and accounting for longer follow-up length would likely increase the mean follow-up costs of radiosurgery further relative to microsurgery. This may make the total cost (the sum of initial and follow-up costs) of the two procedures more comparable.

PCV18

PERIPHERAL ARTERIAL DISEASE IN DIABETIC PATIENTS: A COST-EFFECTIVENESS ANALYSIS COMPARING MAGNETIC RESONANCE ANGIOGRAPHY WITH DIGITAL SUBTRACTION ANGIOGRAPHY

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OBJECTIVES: A decision analytic model was created to compare the potential economic benefits (cost-offsets and cost-effectiveness) of treatment planning for peripheral arterial disease (PAD) with either digital subtraction angiography (DSA) and magnetic resonance angiography (MRA) technology in a diabetic population. **METHODS:** The model considered degree of stenosis, outcomes associated with a treatment plan, risk of complications from DSA and MRA, and associated costs of treatment. Sensitivity and specificity for DSA, considered the